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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,208	04/05/2001	Antti Latva-Aho	324-010243-US(PAR)	5366

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EXAMINER	
DEAN, RAYMOND S	
ART UNIT	**PAPER NUMBER**
2684	

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/827,208	LATVA-AHO ET AL.	
	Examiner	Art Unit	
	Raymond S. Dean	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 5, 8, 11 - 13, 16 - 19* is/are rejected.

7)☒ Claim(s) *6 - 7, 9 - 10, 14 - 15, 20 - 23* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 April 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention.was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 3, 11 – 13, 16 – 17, 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Leu (US 6,791,956).

Regarding Claim 1, Leu teaches a method of connecting an access point to other network elements in a wireless telecommunication system comprising at least one access point and at least one fixed network part (Figure 2, access point (105), fixed network part (108, server of LAN)), the method comprising the steps of: wherein the access point is a base station for offering a wireless connection to a terminal (Figure 2, Column 5 lines 26 – 30, the access point (105) is the base station), storing data on an

IC card for connecting at least one access point to a functional connection with the fixed network part (Column 1 lines 62 – 64, the wireless network card comprises data for connecting the access point (105) to LAN), connecting the IC card inserted in the access point in response to a need to connect the access point to the fixed network part (Column 1 lines 62 – 64, the wireless network card will be connected when the access point (105) needs to connect to the LAN thereby enabling said access point to be connected), and connecting necessary resources of the fixed network part to a functional connection with the access point on the basis of said stored data (Column 1 lines 62 – 64, the access point (105) will be connected in a functional connection with the LAN on the basis of the data stored on the wireless network card).

Regarding Claim 2, Leu teaches all of the claimed limitations recited in Claim 1. Leu further teaches checking in the fixed network part if the IC card is entitled to use the necessary resources of the fixed network part (Figure 2, Column 1 lines 62 – 64, in order for the access point to be connected to the LAN there will be verification or authentication of the wireless network card), and connecting the necessary resources of the fixed network part to a functional connection with the access point in response to the IC card having the right to use the resources of the fixed network part (Figure 2, Column 1 lines 62 – 64, the access point (105) will be connected in a functional connection with the LAN on the basis of said verification or authentication).

Regarding Claim 3, Leu teaches all of the claimed limitations recited in Claim 2. Leu further teaches wherein said data includes an address of at least one fixed network part element and a specific identity of the IC card (Figure 2, Column 1 lines 62 – 64, in

order for the access point (105) to connected to the LAN the wireless network card will need to have the address of a LAN element, said wireless network card will also need to have the identity of said card so that it can be identified by the LAN element), the fixed network part element also comprises data on the IC card, assorted by the specific identity (Figure 2, Column 1 lines 62 – 64, the LAN elements will have the access data of the wireless network card), transmitting a request for connecting the access point to the network element of the fixed network part on the basis of the stored address (Figure 2, Column 1 lines 62 – 64, the access point (105) will be connected in a functional connection with the LAN on the basis of the address of a LAN element), and checking the rights of the IC card by checking the data on the IC card on the basis of the specific identity and by authenticating the IC card (Figure 2, Column 1 lines 62 – 64, in order for the access point to be connected to the LAN there will be verification or authentication of the wireless network card).

Regarding Claim 11, Leu teaches a wireless telecommunication system comprising at least one access point and at least one fixed network part (Figure 2, access point (105), fixed network part (108, server of LAN)), wherein the access point is a base station configured to offer a wireless connection to a terminal (Figure 2, Column 5 lines 26 – 30, the access point (105) is the base station), the access point is arranged to connect an IC card inserted in the access point, onto which is stored data for connecting at least one access point to a functional connection with the fixed network part (Column 1 lines 62 – 64, the wireless network card comprises data for connecting the access point (105) to LAN), and the access point and the fixed network part are

arranged to connect necessary resources of the fixed network part to a functional connection with the access point on the basis of said stored data (Column 1 lines 62 – 64, the access point (105) will be connected in a functional connection with the LAN on the basis of the data stored on the wireless network card).

Regarding Claim 12, Leu teaches all of the claimed limitations recited in Claim 11. Leu further teaches wherein the fixed network part is arranged to check if the IC card is entitled to use the necessary resources of the fixed network part (Figure 2, Column 1 lines 62 – 64, in order for the access point to be connected to the LAN there will be verification or authentication of the wireless network card), and the access point and the fixed network part are arranged to connect the access point and necessary resources of the fixed network part to a functional connection in response to the IC card being entitled to use the necessary resources of the fixed network part (Figure 2, Column 1 lines 62 – 64, the access point (105) will be connected in a functional connection with the LAN on the basis of said verification or authentication).

Regarding Claim 13, Leu teaches all of the claimed limitations recited in Claim 12. Leu further teaches wherein said data comprises an address of at least one fixed network part element and a specific identity of the IC card (Figure 2, Column 1 lines 62 – 64, in order for the access point (105) to connected to the LAN the wireless network card will need to have the address of a LAN element, said wireless network card will also need to have the identity of said card so that it can be identified by the LAN element), the fixed network part element also comprises data on the IC card, assorted by the specific identity (Figure 2, Column 1 lines 62 – 64, the LAN elements will have

the access data of the wireless network card), the access point is arranged to transmit a request for connecting the access point to the network element of the fixed network part on the basis of the stored address (Figure 2, Column 1 lines 62 – 64, the access point (105) will be connected in a functional connection with the LAN on the basis of the address of a LAN element), and the network element of the fixed network part is arranged to check the rights of the IC card by checking the data on the IC card on the basis of the specific identity and by authenticating the IC card (Figure 2, Column 1 lines 62 – 64, in order for the access point to be connected to the LAN there will be verification or authentication of the wireless network card).

Regarding Claim 16, Leu teaches an access point in a wireless telecommunication system, wherein the access point is a base station configured to offer a wireless connection to a terminal ((Figure 2, Column 5 lines 26 – 30, the access point (105) is the base station), the access point comprises card means for connecting an IC card inserted in the access point and for reading data on the IC card (Column 1 lines 62 – 64, the wireless network card comprises data for connecting the access point (105) to LAN) and the access point comprises control means and transceiver means for setting up a functional connection to required resources of a fixed network part on the basis of the data stored on the IC card (Column 1 lines 62 – 64, the access point (105) will be connected in a functional connection with the LAN on the basis of the data stored on the wireless network card).

Regarding Claim 17, Leu teaches all of the claimed limitations recited in Claim 16. Leu further teaches wherein said data comprises an address of at least one fixed

network part element and a specific identity of the IC card (Figure 2, Column 1 lines 62 – 64, in order for the access point (105) to connected to the LAN the wireless network card will need to have the address of a LAN element, said wireless network card will also need to have the identity of said card so that it can be identified by the LAN element), the control means are arranged to send a request including a specific identity of the IC card for connecting the access point to the network element of the fixed network part on the basis of the stored address (Figure 2, Column 1 lines 62 – 64, the access point (105) will be connected in a functional connection with the LAN on the basis of the address of a LAN element), and the control means are arranged to set up a functional connection to at least one network element of the fixed network part in response to an accepted request for connecting the access point (Figure 2, Column 1 lines 62 – 64, in order for the access point to be connected to the LAN there will be verification or authentication of the wireless network card).

Regarding Claim 19, Leu teaches all of the claimed limitations recited in Claim 16. Leu further teaches wherein the access point is a base station in the wireless telecommunication system (Figure 2, Column 5 lines 26 – 30, the access point (105) is the base station).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 4 – 5, 8, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leu (US 6,791,956) in view of Sherer et al. (6,115,376).

Regarding Claim 4, Leu teaches all of the claimed limitations recited in Claim 1. Leu further teaches connecting the access point to a functional connection with the resources of the fixed network part in response to the authentication being acceptable (Figure 2, Column 1 lines 62 – 64, in order for the access point to be connected to the LAN there will be verification or authentication of the wireless network card).

Leu does not teach wherein said data includes at least one key and algorithm required for authenticating the IC card the method further comprising the steps of transmitting an authentication response, calculated by means of at least one key and algorithm, to the fixed network part, authenticating the IC card by checking the transmitted authentication response in the fixed network part.

Sherer teaches at least one key and algorithm required for authenticating the IC card the method further comprising the steps of transmitting an authentication response, calculated by means of at least one key and algorithm (Column 5 lines 54 – 67, Column 6 lines 1 – 5), authenticating the IC card by checking the transmitted authentication response (Column 5 lines 54 – 67, Column 6 lines 1 – 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the authentication method taught by Sherer in the wireless network card of Leu for the purposes of communicating securely and preventing the spoofing of MAC addresses as taught by Sherer.

Regarding Claim 5, Leu teaches all of the claimed limitations recited in Claim 1. Leu does not teach wherein said data includes at least one key and algorithm for ciphering the connection between the access point and the fixed network part, and the method further includes the step of ciphering the traffic between the access point and the fixed network part by utilizing at least one key and algorithm.

Sherer teaches wherein said data includes at least one key and algorithm for ciphering a connection and the method further includes the step of ciphering the traffic by utilizing at least one key and algorithm (Column 5 lines 54 – 67, Column 6 lines 1 – 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the authentication method taught by Sherer in the wireless network card of Leu for the purposes of communicating securely and preventing the spoofing of MAC addresses as taught by Sherer.

Regarding Claim 8, Leu teaches all of the claimed limitations recited in Claim 1. Leu further teaches other data, in addition to said data related to the use of the access points is stored on the IC card (Column 1 lines 62 – 64, typical wireless network cards comprises processors which comprise memory that stores data or code for running said processors).

Leu does not teach wherein the IC card comprises a security function for checking a user of the IC card.

Sherer teaches wherein the IC card comprises a security function for checking a user of the IC card (Column 1 lines 43 – 47, Column 2 lines 39 – 41, promiscuous users are checked such that spoofing can be prevented).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the authentication method taught by Sherer in the wireless network card of Leu for the purposes of communicating securely and preventing the spoofing of MAC addresses as taught by Sherer.

Regarding Claim 18, Leu teaches all of the claimed limitations recited in Claim 16. Leu does not teach wherein the control means are arranged to transmit a request to the IC card for calculating an authentication response and at least one ciphering key, the control means are arranged to transmit the authentication response calculated on the IC card to the fixed network part, and the transceiver means are arranged to cipher the data to be sent to the fixed network part and to decrypt the data received from the fixed network part by means of at least one ciphering key calculated on the IC card.

Leu teaches wherein the control means are arranged to transmit a request to the IC card for calculating an authentication response and at least one ciphering key (Column 5 lines 54 – 67, Column 6 lines 1 – 5), the control means are arranged to transmit the authentication response calculated on the IC card (Column 5 lines 54 – 67, Column 6 lines 1 – 5), and the transceiver means are arranged to cipher the data and to decrypt the data received by means of at least one ciphering key calculated on the IC card (Column 5 lines 54 – 67, Column 6 lines 1 – 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the authentication method taught by Sherer in the wireless network card of Leu for the purposes of communicating securely and preventing the spoofing of MAC addresses as taught by Sherer.

Allowable Subject Matter

6. Claims 6 – 7, 9 – 10, 14 – 15, 20 – 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding Claims 6, 14, 20, and 23, Leu teaches a server (Figure 2, 108) that enables the connection of the access point to the LAN thus the server is the access point server. Leu further teaches checking a right of the IC card to use the resources of the fixed network part (Figure 2, Column 1 lines 62 – 64, in order for the access point to be connected to the LAN there will be verification or authentication of the wireless network card), selecting an access point server for the access point in response to the IC card having the right to use the resources of the fixed network part (Figure 2, Column 1 lines 62 – 64, in order for the access point to be connected to the LAN there will be verification or authentication of the wireless network card), transmitting data on the selected access point server to the access point and data on the access point to be connected to the access point server (Figure 2, Column 1 lines 62 – 64, in order for the access point to be connected to the LAN there will be verification or authentication of the wireless network card, said verification or authentication comprises transmission

and reception of data). Since the server (108) must authenticate the wireless network card said server will comprise authentication data thus said server is also the access point register server. The prior art of record, however, does not teach or show a wireless local area network comprising a radio network controller. Claims 7, 21 depend on Claim 6 and Claims 15, 23 depend on Claim 14 therefore examiner gives same reason as set forth above.

Regarding Claims 9 – 10, The prior art of record fails to teach or show a wireless local area network comprising a UMTS system radio network controller.

Regarding Claim 22, The prior art of record fails to teach or show a wireless network card in a wireless local area network system that includes data required in UMTS system USIM application.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S. Dean whose telephone number is 571-272-7877. The examiner can normally be reached on 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A. Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Raymond S. Dean
November 28, 2005

NAY MAUNG
SUPERVISORY PATENT EXAMINER